# **Room Data Sheet**

Division:

Warehouse

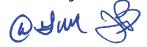
Space Name:

Short Term Storage for EEB

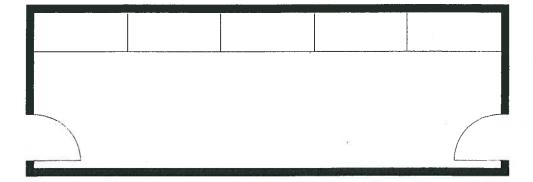
Space Name:	Short lettil storage	IOI ELD		
Requirement	Building Standard *	Other Than Building Standard	<u>Tenant</u> <u>Improvement</u>	Building Shell
Architectural				V
Floor Finish	Sealed Concrete			X
Ceiling Finish	X		.,	X
Wall Finish	X		X	
Base	X		X	
Doors and Hardware	X		X	
Window Covering	N/A			
Security			x	
Security	<b>X</b> -		*	
Electrical				X
Electrical Power	X			^
Electrical Outlets	N/A			
Data/IT	N/A			
Communications	N/A			X
Lighting FC	X			х х
Lighting Controls	X	Occupancy Sensors		^
HVAC				X
Distribution	X			X
Controls	<b>X</b>			^
Specialized Exhaust	N/A			
Plumbing	N/A			
Fire Systems	X			X
Other		Cabinets and Shelving	x	

<sup>\*</sup> Refer to SFO for additional description of building standard requirements

Marine Operations Center - Pacific (MOC-P) NOAA Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 06, 2008



# Test Fit – Mock-up Area for Repair and Training



Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft - November 06, 2008

Marine Operations Center - Pacific (MOC-P) NOAA Page 4.133



## **Room Data Sheet**

Division:

Warehouse

Space Name:

Mock-up Area for EEB Repair and Training

Requirement	Building Standard *	Other Than Building Standard	<u>Tenant</u> Improvement	Building Shell
Architectural				
Floor Finish	Sealed Concrete			x -
Ceiling Finish	Acoustical Tile			×
Wall Finish	Painted GWB		x	
Base	X		x	
Doors and Hardware	X		×	
Window Covering	Blinds		x	
Security				
Security	x		x	X
Electrical				
Electrical Power		Emergency Cut-off Switch		x
		208/240 v		x
		120 v single phase		x
	X	Raised floor not required		x
Electrical Outlets	×	10-20 outlets at work benches	X	
Data/IT	X (not wireless)		х	
Communications	X		x	
Lighting FC	X	100 fc		x
Lighting Controls	Х	Occupancy Sensors		x
HVAC				
Distribution	X			x
Controls	X			x
Specialized Exhaust		Required		x
Plumbing	X	Connections for utility sink	X	
		Connections for emergency shower, sink, restroom (or proximity to restroom)	X	
Fire Systems	X	Waterless system, to be determined during design		x
Other		Paint lockers	X	
		Emergency shower in or near mock-up area	X	
		Operable windows (desired)	•	x
		Utility sink	×	
		Restroom or proximity to		X
Parine Operations Center 1	Racific (MOC-P)	restroom	Eacility D	rogramming and (

Marine Operations Center Pacific (MOCP)
NOAA
Page 4.134

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 06, 2008



**Room Data Sheet** 

Division:

Warehouse

Space Name:

**EEB Storage in Warehouse** 

Requirement	Building Standard *	Other Than Building Standard	Tenant improvement	Building Shell
Architectural				
Floor Finish	Sealed Concrete			x
Ceiling Finish	X			x
Min. Ceiling Height	18'			x
Wall Finish	X		x	
Base	X		x	
Doors and Hardware	X		x	
Window Covering	N/A			
Security				
Security	X		X	X
Electrical				
Electrical Power	X			
Electrical Outlets	N/A			
Data/IT	N/A			
Communications	X		x	
ighting FC	Refer to Warehouse standard in SFO			X
ighting Controls	Χ	Occupancy Sensors		X
HVAC				
Distribution	X			X
Controls	Х			X
Specialized Exhaust	N/A			
Plumbing	N/A			
Fire Systems	X			x
Other				
		Enclose perimeter of EEB Storage space	Х	
	S.	Two types of storage used by EEB: 1) Storage for repair parts, 2) Cabinets and Shelving for parts used to repair equipment; 16' rack height for long term storage	- <b>X</b>	

\* Refer to SFO for additional description of building standard requirements

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Marine Operations Center - Pacific (MOC-P) NOAA Page 4.135



# **Room Data Sheet**

Division:

Electronics Engineering (EEB) Shop

Space Name:

Secure Storage

Jpace Hamer				
Requirement	<u>Building</u> Standard *	Other Than Building Standard	<u>Tenant.</u> Improvement	Building Shell
Architectural				
Floor Finish	X		x	
Ceiling Finish	X			Х
Wall Finish	X		X	
Base	X		X	
Doors and Hardware	X		X	
Window Covering	N/A			
Security				
Security	* X		X	X
Electrical				
Electrical Power	N/A			
Electrical Outlets	N/A			
Data/IT	N/A			
Communications	N/A			
Lighting FC	X			X
Lighting Controls	X	Occupancy Sensors		X
HVAC				
Distribution	X			X
Controls	X			X
Specialized Exhaust	N/A			
Plumbing		N/A		
Fire Systems	х	Waterless system; to be determined during design		X
Other		Cabinets and Shelving	x	

<sup>\*</sup> Refer to SFO for additional description of building standard requirements

Marine Operations Center - Pacific (MOC-P) NOAA Page 4.136 Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 06, 2008



# **Room Data Sheet**

Division:

Warehouse

Space Name:

**Ammunition Vault** 

Space Name:	Ammunition vauit			
Requirement	Building Standard *	Other Than Building Standard	Tenant Improvement	Building Shell
Architectural				
Floor Finish	Sealed Concrete			x
Ceiling Finish	X	Fire Resistive Finish	X	
Wall Finish	X	Fire Resistive Finish	X	
Base	X		X	
Doors and Hardware	x	Vault/ Safe door	X	
Window Covering	N/A			
Security				
Security	x		x	x
Electrical				
Electrical Power	Х			
Electrical Outlets	N/A			
Data/IT	N/A			
Communications	N/A			
Lighting FC	x			x
Lighting Controls	X	Occupancy Sensors		x
HVAC				
Distribution	Х			X
Controls	X			x
Specialized Exhaust	N/A			
Plumbing	N/A			
Fire Systems	x	Specialized as required by ammunition		x
Other		300 pounds per square foot floor loading		

<sup>\*</sup> Refer to SFO for additional description of building standard requirements

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft - November 06, 2008

Marine Operations Center - Pacific (MOC-P) NOAA Page 4.137



## **Room Data Sheet**

**Division:** 

Warehouse

Space Name:

Storage for EEB Repair Parts and Test Equipment

Requirement	Building Standard *	Other Than Building Standard	Tenant Improvement	Building Shell
Architectural				
Floor Finish	x		x	
Ceiling Finish	x			x
Wall Finish	X		x	
Base	X		x	
Doors and Hardware	X		x	
Window Covering	N/A			
Security				
Security	X	ų.	X	X
Electrical				
Electrical Power	N/A			
Electrical Outlets	N/A			
Data/IT	N/A			
Communications	N/A			
Lighting FC	X			X
Lighting Controls	x	Occupancy Sensors		X
HVAC				
Distribution	×			X
Controls	×			X
Specialized Exhaust	N/A			^
Plumbing		N/A		
Fire Systems	x	Waterless system; to be determined during design		x
Other		Cabinets and Shelving		

<sup>\*</sup> Refer to SFO for additional description of building standard requirements

Marine Operations Center - Pacific (MOC-P) NOAA

Page 4.138

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 06, 2008

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# **Pier Requirements**

his section summarizes the general requirements for the piers. Additional requirements are contained in the SFO. The US Army Corps of Engineers (USACE) Technical Manual on Engineering Design of Military Ports, TM5-850-1 provides information related to acceptable planning, design, and construction practices.

# **Shell Building Requirements**

## **Large Ship Piers**

- Provide 1,560 of usable linear feet for large ships. This length was determined by providing 260 linear ft. for each of 6 vessels.
- The desirable pier width is 30 ft. (The minimum acceptable pier width shall not be less than 25 ft. overall with at least 20 feet of usable width.)
- The live load for the large ship piers will be at least 500 lbs. per
- Provide utility service connections up to the pier.
- Provide an under-pier fire sprinkler system designed to meet applicable codes for all timber piers. See additional requirements on page 7.2.
- Refer to the following pier data sheets for additional requirements.

#### **Small Boat Pier**

- In addition to the pier requirements for large ships above, provide 400 linear feet of small boat pier.
- Provide utility service connections up to the pier.
- Refer to the following pier data sheets for additional requirements.

# **Tenant Improvements**

#### Cameras

Install CCTV cable from all camera locations, as needed for visual monitoring of all piers, back to the IT room in the administration building.

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# Pier Requirements

#### **Utilities**

Provide utilities from the beginning of the pier to the service stations for the large boat pier. Provide convenience utilities at regular intervals on the small boat pier.

## **Data Cable**

Install fiber optic cable from each ship berthing location back to the IT room in the administration building.

## **Telecommunications**

Install shielded telephone trunk and cable television cable to all berthing locations back to the IT room.

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #09WSA0200C Page 5.2

# **Pier Data Sheet**

**Division:** 

Piers

Space Name:

Large Ship Piers \*

Requirement	<u>Building</u> Standard *	Other Than Building Standard	Tenant Improvement	Building She
Security				
Security	X	Security pull stations	X	
		Conduit with alarm cabling to be run to each berthing station	X	
Electrical				
Electrical Power	X	480 v/800 amp. 3 phase at each berthing station	х	
Electrical Outlets	x		X	
		220/110 v convenience power at each berthing station	x	
Data/IT	X (not wireless)	Fiber Optic	X	
Communications	X	4 to 6 telephone lines to each berthing area		X
	x	Connections at berthing area	X	
	X	Cable television to each berthing area		x
Lighting	X	Security lighting	×	
		Navigational lighting		×
		Under pier lighting	x	
Plumbing		40-60 psi potable water and City sewer connections for each berth	<b>x</b>	
Fire Systems	X	Meet fire code, see reference documents; provide sprinkler system for timber construction		X
	X	Fire fighting stations along pier	x	
Pillar Cleats or Mooring Bollards		36" minimum pillar cleats or mooring bollards, spaced 50' or less on piers		×
		Each cleat to be rated for 100,000 pound pull		x
Other		Ladders to access water below pier		X
		Steam (75 psi) for at least 3 berthing stations (all stations would be desirable)	X	
		Convenience hose bibb at each ship	X	
		Stanchions for life ring		X

<sup>\*</sup> Reference NFPA for requirements for either concrete or timber piers during design;

utilities up to water's edge are shell, and utilities along the pier to the berthing stations are TI

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft - November 21, 2008

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #0 9WSA0200C Page 5.3

# **Pier Requirements**

## **Pier Data Sheet**

Division:

Piers

**Space Name:** 

Small Boat Pier\*

Requirement	Building Standard *	Other Than Building Standard	<u>Tenant</u> Improvement	Building Shell
Security				
Security	X	Security pull station	Х	
		Conduit with alarm cabling to be run to berthing station	X	
Electrical				
Electrical Power	X	220/110 v convenience power at each boat	x	
Electrical Outlets	X		X	
Data/IT	X (not wireless)	Fiber Optic	X	
Communications	х		X	
Lighting	X	Security lighting	x	
		Navigational lighting		X
		Under pier lighting	X	
Plumbing		40-60 psi potable water and City sewer connections for each berth	X	
Fire Systems	X	Meet fire code, see reference documents; provide sprinkler system for timber construction *		X
Pillar Cleats or Mooring Bollards		Appropriate cleats for small boats		x
Other		Ladders to access water below pier		x
		Convenience hose bibb at each boat	x	

<sup>\*</sup> Reference NFPA for requirements for concrete, timber or composite piers during design; utilities up to water's edge are shell, while utilities along the pier to the berthing stations are TI

Marine Operations Center - Pacific (MOC-P)
NOAA, SFO #09WSA0200C
Page 5.4

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 21, 2008

# **Site Requirements**

his section presents general requirements related to site development. The site development will conform to LEED criteria wherever possible.

# **Shell Building Requirements**

## **Parking**

Provide for: 125-150 parking spaces (100 secured)\*. They include:

- a) Unsecure visitor cars (in a separate area)
- b) Parking stalls staff
- c) Government vehicles (cars, minivans, and pickup trucks)
- d) Contractor vehicles (close to the contractor building)
- e) Long-term parking (for personnel deployed on ships may be off-site)

The number of parking spaces for each category will be provided later, and the total number of parking spaces will vary based upon distance from the Western Regional Center. If the new MOC-P facility is within 50 miles of the Western Regional Center, some of the parking area at the Western Regional Center may accommodate some of the new MOC-P parking requirements.

# **Truck Maneuvering Yard**

Provide a sufficient area for 18 wheelers to turn around, to easily load and unload (at the warehouse, the shops complex, and material laydown area), and to back onto the piers to service the ships. The specific configuration will be a function of the site. The offeror's architect should include the projected turning radius of large trucks onto the site plan to ensure the layout is functional. Paving in this area needs to be able to withstand heavy truck traffic without damage.

#### **Guard Station**

Provide a guard station to control landside access onto the site. The guard station shall be heated and air conditioned.

### Material Laydown Area

Provide an open, hard surface area of approx. 20,000 sq. ft. for exterior storage.

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 21, 2008

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### **Outdoor Storage**

Provide 10,000 sq. ft. of open outdoor storage. For sites within 20 miles of Sandpoint in Seattle, this requirement could be accommodated at the Western Regional Center. The storage could also be provided at another location that is within 20 miles of the proposed site.

## **Hazardous Material and Hazardous Waste Building**

Provide a 300 sq. ft. all weather building to store hazardous materials and hazardous waste. Locate this building adjacent to the material laydown area, but away from all buildings, occupied areas, and walkways. The building should be well ventilated and secure from unauthorized entry.

#### **Contractor Area**

The contractor area is to include a separate 500 sq. ft building as well as 3 of 8x20' containers and a laydown area. This area is to be used by contractors tending the ships. The building needs to be self-contained, with its own restrooms and HVAC. It should also include an office and tool storage. Locate this building inside the secured perimeter, with easy access to the piers and adjacent to the material laydown yard.

#### **Exterior Break Area**

Provide a paved area with a permanent canopy for employee use.

#### **Fencing**

Provide seven foot chain link fencing with barbed wire or other top guard around the site perimeter, along with a means to secure the site after hours. Provide a second fence around the visitor parking area to restrict access between the visitor parking and the rest of the site and piers.

## Site Lighting

Provide site lighting (with automatic timer controls) that complies with local codes to create a safe and secure environment for all exterior areas, including piers.

#### **Emergency Generator**

Provide an emergency generator. The size of the generator will be adequate to provide emergency power to all IT and security systems that NOAA identifies as mission critical, and to provide

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #09WSA0200C Page 6.2

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adequate air conditioning to those systems. The generator and fuel supply will be designed provide adequate power for 72 hours.

## Landscaping

Provide landscaping around the site that complies with local code requirements and conforms to LEED criteria. Include an automatic landscape irrigation system. Provide hose bibbs at convenient locations across the site.

#### **Fire Hydrants**

Provide appropriate fire hydrants on the site and piers as required by local authorities.

#### **Conduits**

Provide four inch PVC conduits from each building and ship berthing location back to the IT room in the administration building in the following quantities:

- Provide two conduits to the warehouse, the shops complex, and piers.
- Provide one conduit to the guard station and to each exterior security camera.

Direct bury the conduits (or mount to the underside of the piers). Protect the conduits in concrete anywhere they pass beneath vehicle traffic areas. Provide adequate drainage for the conduits so they do not serve as a route for water to enter a building.

#### **Totem Pole**

Provide a protected area for an existing totem pole. This area needs to have an appropriate way to anchor the totem pole, be covered by a roof, have natural ventilation, and have appropriate lighting.

# **Tenant Improvements**

#### Cameras

Install CCTV cable from all camera locations, as needed for visual monitoring of all exterior areas and piers, back to the IT room in the administration building. Route cable through the conduit listed above.

November 21, 2008

# **Site Requirements**

#### **Data Cable**

Install fiber optic cable from each building, security camera, and ship berthing location back to the IT room in the administration building. Route cable through the conduit listed above.

#### **Telecommunications**

Install shielded telephone trunk cable to all berthing locations back to the IT room. Route cable through the conduit listed above.

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #0 9WSA 0 2 0 0 C Page 6.4

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# **Other Requirements**

his section addresses other requirements that affect the project and are appropriate to include in the program of requirements. This is not an all-inclusive list of requirements, but is intended to point out major issues that need to be addressed.

# **Sound Pollution**

Because the MOC –P may be located in an industrial area, it is very likely that sound pollution from neighboring land uses, passing trains, and other noise sources will negatively impact the staff who will work at this location. If the site chosen is in a noisy industrial area, the building enclosure should achieve a sound transmission coefficient (STC) of 60 or higher. If the chosen site is not in a noisy industrial area, an STC rating of 50 would suffice.

# **Security**

Security should be thought of in terms of the following major categories. Security measures for one category may or may not be adequate for another category:

- Providing for the physical safety of staff, contractors, and visitors in compliance with ISC standards for a Level III facility
- Protecting against unwanted intrusion (by land and by sea) through the use of physical and electronic means in compliance with a Level III facility
- Protecting physical assets from theft and damage through the use of physical and electronic means
- Protecting data and networks, with special attention to the server room, which should be enclosed with walls that extend to the structure above
- Safeguarding archives and historical items through use of physical and electronic means

The Offeror's architect shall work with security experts from the Region Security Office of the Department of Commerce to incorporate applicable solutions for each security category.

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft - November 21, 2008

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## **Natural Disasters or Fire**

The MOC-P facility should endeavor to protect workers, equipment, data and normal operations from the hazards of natural disasters and fire. Mission critical operations should be provided for in times of emergency.

# **Applicable Codes and Standards**

The project site has not been determined, so it is not possible to include a list of applicable codes, because they will vary by jurisdiction. However, the Offeror's architect must identify and comply with all codes and standards that apply to this project at the local, state, and federal level. The following is a partial list of some of the different types of codes and standards that will apply to the design of this project.

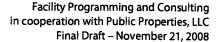
- Building codes (including mechanical, electrical & plumbing codes), as required by region and city (facility to be constructed to the 2006 or later version of the International Building Code at minimum)
- Seismic codes
- Fire protection codes
- Energy conservation codes and standards
- Life safety codes
- Accessibility standards
- Office of the Chief Information Officer Facility IT Standards Guide
- GSA and Department of Commerce Standards and Guidelines
- Department of Homeland Security and other applicable security standards and guidelines
- US Army Corps of Engineers and other pier design codes and standards
- Dept. of Commerce Fire Protection Standards for Leased Piers (see below)

# **Fire Protection on Leased Piers**

Prior to occupancy, the offered pier or dock space shall meet the following mandatory requirements, excerpted from the Dept. of Commerce Real Property Management Division Policy Bulletin 19:

The applicable egress requirements in NFPA 101, Life Safety Code, or an alternative approach or method for achieving a

Marine Operations Center - Pacific (MOC-P)
NOAA, SFO #0 9WSA 0 2 0 0 C
Page 7.2



level of safety deemed equivalent and acceptable by the Government.

- The applicable requirements in NFPA 303, Fire Protection Standards for Marinas and Boatyards. This provides a minimum acceptable level of safety to life and property from fire and electrical hazards at marinas and related facilities.
- The applicable requirements in the NFPA 307, General Principles for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves.
- Maintenance of fire protection and life safety systems: Electrical and fire and life safety systems on the premises shall be maintained and tested annually in accordance with requirements of the applicable local or NFPA codes (101, 303, and 307), whichever governs."

## **Data and IT Cable Installation**

MOC-P has developed specific standards for data and communications cable installation. These will be provided to the offeror's architect after award.

# Leadership in Energy and Environmental Design (LEED) Certification

This project shall obtain a minimum certification of LEED Silver.

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction. The offeror's architect shall be responsible for determining which version of LEED (new construction, existing buildings, commercial interiors, etc.) applies to this project. The LEED rating system is divided into five environmental categories and one general category for innovation.

#### Sustainable Sites

(1 prerequisite, 14 possible points) This category targets many site related activities and strategies such as construction pollution prevention, site selection and development, density and community connectivity, Brownfield redevelopment, alternative transportation, storm water design, heat island effect and light pollution reduction.

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#### Water Efficiency

(5 possible points) This category focuses on efficient landscaping techniques, innovative wastewater technologies, and water use reduction.

#### Energy & Atmosphere

(3 prerequisites, 17 possible points) This category defines fundamental commissioning of energy systems, minimum energy performance and fundamental refrigerant management. Additional points can be obtained for level of optimized energy performance, percent of on-site renewable energy, enhanced commissioning, enhanced refrigerant management, measurement and verification and green power.

#### Material & Resources

(1 prerequisite, 13 possible points) This category addresses the storage and collection of recyclables, building reuse percents, construction waste management, materials reuse, use of recycled content, regional materials, and rapidly renewable materials and certified woods.

#### Indoor Environmental Quality

(2 prerequisites, 15 possible points) This category awards points for design strategies that improve the indoor environment for the building's users. It defines a minimum Indoor Air Quality (IAQ) Performance and Environmental Tobacco Smoke (ETS) Control. Optional points are awarded for outdoor air delivery monitoring, increased ventilation, construction IAQ management plan during construction and before occupancy, low-emitting materials for adhesives and sealants, paints and coatings, carpet systems and composite wood and agrifiber products, indoor chemical and pollutant source control, controllability of systems, thermal comfort design and verification and percent of spaces with daylight and views.

#### Innovation & Design Process

(5 possible points) This category provides the opportunity for the architect to receive points for innovative design strategies not covered in the previous five categories. One point is given for having a LEED Accredited Professional on the team.

Some jurisdictions, including King County, have local LEED supplements.

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #09WSA0200C Page 7.4

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## Certification

Different LEED versions have varied scoring systems based on a set of required "prerequisites" and a variety of "credits" in the six major categories listed above. In LEED v2.2 for new construction and major renovations for commercial buildings there are 69 possible points and buildings can qualify for four levels of certification:

- Certified 26-32 points
- Silver 33-38 points required for this project
- Gold 39-51 points
- Platinum 52-69 points

## Registration

The Marine Operations Center – Pacific project must be registered through the USGBC Web site (www.usgbc.org). This step establishes contact with the USGBC and it will provide the project team access to resources that explain and facilitate the LEED application process.

#### **Documentation**

Documentation must be prepared to satisfy the prerequisite and credit submittal requirements and create the application for the rating. The offeror's architect shall appoint a LEED Accredited Professional to act as the project contact and team member responsible for coordinating the certification process.

## **Credit Interpretations**

If difficulties applying a LEED prerequisites or credits to the project arise, the USGBC has a process to address and resolve any questions and issues. The appropriate USGBC reference guide should be consulted for detailed information about the process.

## **Application**

The achievement of all points for the must be well documented. The application process for LEED Certification is well documented on the LEED website (<a href="www.usgbc.org">www.usgbc.org</a>). The certification review process, forms, schedules and fees can be found at this website.

#### Certification

LEED certification is obtained after submitting an application documenting compliance with the requirements of the rating system as well as paying registration and certification fees.

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft - November 21, 2008

Marine Operations Center - Pacific (MOC-P) NOAA, SFO #09WSA0200C Page 7.5 Certification is granted solely by the Green Building Council responsible for issuing the LEED system used on the project.

## **Project Approach**

Achieving a LEED rating requires a sustained team effort from design through construction by the architect, engineers and consultants, and other team members. Commitments include, at minimum, paying for whole building commissioning, mandating a smoke-free environment, and ensuring on-site recycling. Further LEED points may be gained through Green Power purchases, water efficient landscaping, low-flow plumbing fixtures, sustainable design education, and other strategies that may not be standard campus practices. The contractor has a broad role; including ensuring that specified goals for recycled content, regional materials and low-emitting materials are met. The contractor can add to the LEED rating by recycling construction waste and maintaining a clean indoor work environment.

The selection of an MEP engineer with experience building LEED buildings will be especially helpful in obtaining the required Silver rating (or higher), as MEP systems have a large impact on the efficiency of the building.

A LEED strategy should be mapped out and agreed to in order to ensure that the building is as green as possible and that opportunities to gain points do not fall between the cracks. The project must be registered with the U.S. Green Building council as a LEED project. Official certification of the project as LEED Silver or above will occur soon after occupancy of the building.

# **LEED Checklist**

The LEED for New Construction v2.2 checklist has been included on the following pages.

Marine Operations Center - Pacific (MOC-P)
NOAA, SFO #09WSA0200C
Page 7.6

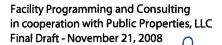


# LEED for New Construction v2.2 Registered Project Checklist

Project Name: Project Address:

Yes ?	No		
	Sust	ainable Sites	14 Points
V	Prereg 1	Construction Activity Pollution Prevention	Required
1220 BAS	Credit 1	Site Selection	required 1
	Credit 2	Development Density & Community Connectivity	1
1759	Credit 3	Brownfield Redevelopment	1
	Credit 4.1	Alternative Transportation, Public Transportation Access	1
150	Credit 4.2	Alternative Transportation, Fubility Transportation Access  Alternative Transportation, Bicycle Storage & Changing Rooms	1
	Credit 4.3	Alternative Transportation, Dicycle Storage & Changing Nooms  Alternative Transportation, Low-Emitting & Fuel-Efficient Vehicles	1
No. 70 Table	Credit 4.4	Alternative Transportation, Parking Capacity	1
120 13	Credit 5.1	Site Development. Protect or Restore Habitat	1
	Credit 5.2	Site Development, Maximize Open Space	1
	Credit 6.1	Stormwater Design, Quantity Control	1
	Credit 6.2	Stormwater Design, Quality Control	1
150	Credit 7.1	Heat Island Effect, Non-Roof	1
100 July 100 To	Credit 7.2	Heat Island Effect, Roof	1
	Credit 8	Light Pollution Reduction	1
Yes ?	No		
	Wate	er Efficiency	5 Points
	Credit 1.1	Water Efficient Landscaping Reduce by 500/	4
100 K	Credit 1.2	Water Efficient Landscaping, Reduce by 50% Water Efficient Landscaping, No Potable Use or No Irrigation	1
AND CASE	Credit 2	Innovative Wastewater Technologies	1
100 Hz	Credit 3.1	Water Use Reduction, 20% Reduction	,
1999 (155)	Credit 3.2	Water Use Reduction, 30% Reduction	1
(2007) III (100)	10.000.2	Water Ose Neudetion, 50 % Neudetion	
П	Ener	gy & Atmosphere	17 Points
Y	Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
Y	Prereq 2	Minimum Energy Performance	Required
Y	Prereq 3	Fundamental Refrigerant Management	Required
		<del>-</del>	-

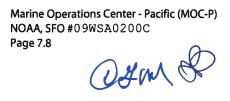
\*Note for EAc1: All LEED for New Construction projects registered after June 26th, 2007 are required to achieve at least two (2) points under EAc1



Credit 1	Optimize Energy Performance	1 to 10
	10.5% New Buildings or 3.5% Existing Building Renovations	1
	14% New Buildings or 7% Existing Building Renovations	2
	17.5% New Buildings or 10.5% Existing Building Renovations	3
	21% New Buildings or 14% Existing Building Renovations	4
	24.5% New Buildings or 17.5% Existing Building Renovations	5
	28% New Buildings or 21% Existing Building Renovations	6
	31.5% New Buildings or 24.5% Existing Building Renovations	7
	35% New Buildings or 28% Existing Building Renovations	8
	38.5% New Buildings or 31.5% Existing Building Renovations	9
	42% New Buildings or 35% Existing Building Renovations	10
Credit 2	On-Site Renewable Energy	1 to 3
	2.5% Renewable Energy	1
	7.5% Renewable Energy	2
	12.5% Renewable Energy	3
Credit 3	Enhanced Commissioning	1
Credit 4	Enhanced Refrigerant Management	1
Credit 5	Measurement & Verification	1
Credit 6	Green Power	1

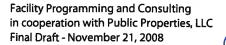
continued...

	Mate	erials & Resources	13 Points
	Prereq 1	Storage & Collection of Recyclables	Required
動動	Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1
	Credit 1.2	Building Reuse, Maintain 100% of Existing Walls, Floors & Roof	1
	Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
	Credit 2.1	Construction Waste Management, Divert 50% from Disposal	1
\$ 1 PX	Credit 2.2	Construction Waste Management, Divert 75% from Disposal	= 1
7.51	Credit 3.1	Materials Reuse, 5%	1
	Credit 3.2	Materials Reuse,10%	1
	Credit 4.1	Recycled Content, 10% (post-consumer + ½ pre-consumer)	1
	Credit 4.2	Recycled Content, 20% (post-consumer + ½ pre-consumer)	1
	Credit 5.1	Regional Materials, 10% Extracted, Processed & Manufactured Region	1
	Credit 5.2	Regional Materials, 20% Extracted, Processed & Manufactured Region	
	Credit 6	Rapidly Renewable Materials	1
1 6 3	Credit 7	Certified Wood	1



Ind	oor Environmental Quality	15 Point
Prereq 1	Minimum IAQ Performance	Require
Y Prereq 2	Environmental Tobacco Smoke (ETS) Control	Require
Credit 1	Outdoor Air Delivery Monitoring	
Credit 2	Increased Ventilation	
Credit 3.1	Construction IAQ Management Plan, During Construction	
Credit 3.2	Construction IAQ Management Plan, Before Occupancy	
Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	
Credit 4.2	Low-Emitting Materials, Paints & Coatings	
Credit 4.3	Low-Emitting Materials, Carpet Systems	
Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	
Credit 5	Indoor Chemical & Pollutant Source Control	
Credit 6.1	Controllability of Systems, Lighting	
Credit 6.2	Controllability of Systems, Thermal Comfort	
Credit 7.1	Thermal Comfort, Design	
Credit 7.2	Thermal Comfort, Verification	
Credit 8.1	Daylight & Views, Daylight 75% of Spaces	
Credit 8.2	Daylight & Views, Views for 90% of Spaces	
es ? No		
Inn	ovation & Design Process	5 Point
Credit 1.1	Innovation in Design: Provide Specific Title	
Credit 1.2	Innovation in Design: Provide Specific Title	
Credit 1.3	Innovation in Design: Provide Specific Title	
Credit 1.4	Innovation in Design: Provide Specific Title	
Credit 2	LEED® Accredited Professional	
es ? No	LLLD Accieutted Flotessional	
Pro	ect Totals (pre-certification estimates)	<b>69</b> Points
	out rotato (pre-certification estimates)	<b>03</b> 1 01111

Certified: 26-32 points, Silver: 33-38 points, Gold: 39-51 points, Platinum: 52-69 points



Marine Operations Center - Pacific (MOC-P) NOAA, SFO #09WSA0200C Page 7.10

# **Concept Diagrams**

his section illustrates a graphic interpretation of the space and adjacency requirements presented in this program for the Administration Building. They are only included to help the reader visualize one possible configuration for the MOC-P Administration Building. Other layouts are possible. These illustrations should not to be considered architectural drawings. It is assumed that the Offeror will engage a licensed architect to further interpret this program of requirements and produce an appropriate design for the Administration Building as well as Shops Complex and Warehouse.

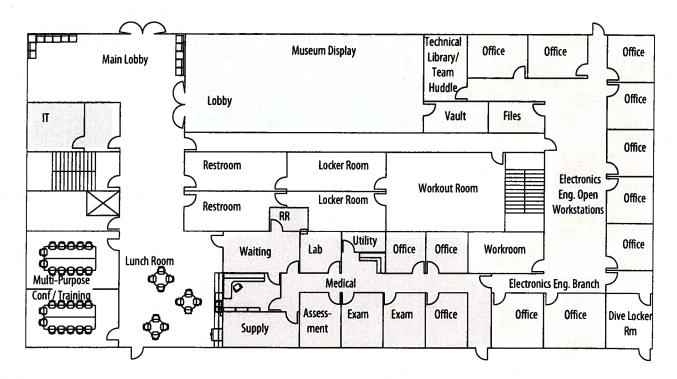
# Concept Diagrams of the Administration Building

The following exhibits assume that the administration building will be two stories tall (one story or three story solutions are also possible). These exhibits are based on the following assumptions:

- A building that is planned according to LEED principles will allow natural light to penetrate deep into the work areas instead of ringing the perimeter with enclosed offices
- The typical office areas will be a combination of enclosed offices and open plan systems workstations
- It is not necessary to construct demising partitions between divisions. It is more flexible to use furniture partitions and lateral file cabinets to separate different areas. This also helps distribute natural light. The Command Suite is the only office suite that is enclosed by walls.
- There is a central receptionist and point of security at each floor
- Most of the office areas are located on the second floor
- The Electronics Engineering Branch (EEB) is located on the ground floor to be close to the EEB Shop
- There is a visitor entry and museum on the first floor that will be accessed by the general public



# First Floor of the Administration Building

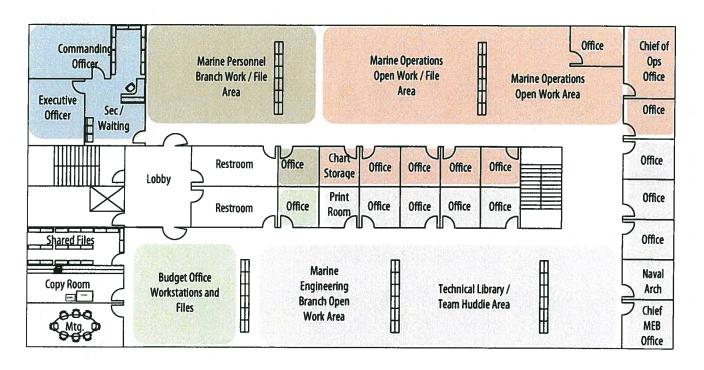


Concept Diagrams are intended only to illustrate requirements. They are not to be used for design. Any layout or design shall be prepared by the Offeror's architect.

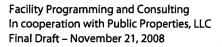
Marine Operations Center - Pacific (MOC-P) NOAA, SFO #0 9WSA0200C Page 8.2

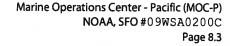


# **Second Floor of the Administration Building**



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Marine Operations Center - Pacific (MOC-P)
NOAA, SFO #0 9WSA 0 2 0 0 C
Page 8.4

Facility Programming and Consulting in cooperation with Public Properties, LLC Final Draft – November 21, 2008





Frost Bank Tower, Suite 1100 100 West Houston Street Son Antonio, Texas 78205 Phone: 210/228-9600 Fax: 210/228-9697 facilityprogramming.com

Architectural Programming Laboratory Planning Healthcare Planning Strategic Facilities Planning Needs Assessment Space Utilization Analysis

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